

First ICOD Symposium

Innovative therapeutic approaches for cognitive impairment in Down syndrome

In occasion of the World Down syndrome Day (21st of march 2022)

Troina, March 20-21st 2022 CITTADELLA DELL'OASI Troina, Italy

Scientific Programme ICOD Committee Coordinator

Filippo Caraci (University of Catania & Oasi Research Institute)

International Scientific Committee

Renata Bartesaghi (Bologna)
Rafael De La Torre (Barcelona)
Mara Dierssen (Barcelona)
Filippo Drago (Catania)
Beatriz Fagundo (Barcelona)
Stephanie Monlezun (Bordeaux)
Lucio Nitsch (Naples)
Pier Vincenzo Piazza (Bordeaux)

The Italian Task Force for DS

Local Scientific Committee
Eleonore Venin, Lorenzo Mercadante, Concetta
Barone, Corrado Romano, Serafino Buono,
Claudia Guerrera, Marilena Recupero

Local Organizing Secretariat Eleonora Di Fatta, Alba Romeo, Rosi Di Giorgio, Fabio Vezzuto

Rationale

Down syndrome (DS) causes life-long cognitive impairment which results in significant consequences for the individuals, their families and society leading to a reduced **quality of life and social stigma**. Despite this heavier social burden and the greater medical needs, **there is not an approved therapy for DS-related cognitive impairment yet**.

The ICOD project (Improving COgnition in Down syndrome), funded by European Union, aims to address these unmet clinical needs with a first-in-class new pharmacological treatment (AEF0217) specifically designed to address the core cognitive impairment of individuals with DS: working memory. Working memory and memory flexibility play an important role in everyday tasks like following instructions, planning activities or understanding a conversation.

The first ICOD symposium will take place in Troina in 2022 at IRCCS Oasi Research Institute on the occasion of the World Down syndrome Day (March 21st). The symposium will be specifically dedicated to increase the knowledge about innovative therapeutic approaches in the management of cognitive deficits in DS.

This event will include:

- Pre-symposium meeting (March 20th, 16:00-19:00): the first face-to-face meeting of the ICOD consortium.
- The World Down syndrome Day (March 21st) will be dedicated to discuss in lay terms the most relevant findings in the field of cognition in DS. Discussion sections have been planned for families and associations to promote faceto-face interaction with researchers involved in the ICOD project as well as with other researchers working in the field of DS.
- This event will be designed in close cooperation with the European Down syndrome Association (EDSA) and associations of each participating European country; in particular with Italian Down syndrome organizations, such as the Italian Association for Down syndrome individuals (AIPD), the National Coordination of the Italian Associations of individuals with Down syndrome (/https://www.coordown.it).

Sunday March 20th 2022

16:00h - 19:00h

Pre-symposium: the first F2F meeting of the ICOD project

The European consortium is led by IMIM (Rafael de la Torre, Barcelona, Spain) and AELIS FARMA (Stephanie Monlezun & Pier Vincenzo Piazza, Bordeaux, France) in collaboration with Oasi Research Institute (Filippo Caraci, UniCT, Catania & Oasi Troina, Italy), Institut Jérôme Lejeune (Sophie Durand, Paris, France), Centre Hospitalier Universitaire (Renaud Touraine, Saint-Etienne, France) and the Hospital Universitario de la Princesa (Diego Real de Asúa, SERMAS, Madrid, Spain).

Monday March 21st, 2022

09:00h - 09:15h
Introduction to the ICOD symposium
(Filippo Caraci, Italy)

Session 1: Cognition in DS Introduced and moderated by Filippo Caraci (Italy)

09:15-09:45

Understanding and treating cognitive deficits in DS: the innovative approach of the ICOD project

Rafael de la Torre, Spain

09:45 - 10:15

What is behind cognitive dysfunction in DS? From understanding the neurobiology to therapy

Mara Dierssen, Spain

10:15 - 10:45

Cognitive assessment in DS: what, why and how

Beatriz Fagundo, Spain

10:45 - 11:30

Discussion with families and associations: expectations about therapy for cognitive deficits: what do families know and what they expect. Chaired by Diego Real De Asua (Spain) & Marzia Perluigi, (Italy)

11:30 - 11.45 / Break

11:45 - 12:15

The involvement and expectations of families in clinical research: ethical aspects

Ségolène Aymé, (France)

12:15 - 13:30

Scientists meet DS associations and families: the key role of Italian DS Task Force

Lucio Nitsch & Renata Bartesaghi, (Italy)

13:30 - 15:00 / Lunch

Session 2: Cognition in DS Introduced and moderated by Rafael De La Torre (Spain)

15.00-15.30

Ageing in DS, a genetic form of Alzheimer's disease

Marzia Perluigi, (Italy)

15:30-16:00

An innovative psychometric tool for the evaluation of cognitive deficits in DS: the Bordeaux maze test

Nicole Etchamendy, (France)

16:00-16:15 / Break

Monday March 21st, 2022

Session 3: Innovative strategies for the diagnosis and treatment of cognitive deficits in DS Introduced and moderated by Filippo

Drago (Italy) 16:15 - 17:00

AEF0217: a new path for the treatment of cognitive impairment in DS

Pier Vincenzo Piazza, (France)

17:00 - 17:30 (20 min talk, 10 min questions) Discussion with families and associations: Timing of therapies for DS: when, what, how long.

Chaired by Stephanie Monlezun (France) & Stefano Vicari (Italy)

17:30 - 18:00

Psychopathological features, cognitive dysfunction and comorbidity in DS Stefano Vicari (Italy)

18:00 - 18:30

The ICOD project (Improving COgnition in Down syndrome): what will it bring to families?

Rafael De La Torre & Filippo Caraci

18:30 - 19:00

Discussion with families and associations: the importance of research for people with DS

Chaired by Sophie Durand and Renaud Touraine, (France)

19:00 - 19:15 Concluding remarks Rafael De La Torre, (Spain)

